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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,092	10/09/2003	Hirokazu Shimizu	Q77827	8112

23373 7590 02/10/2009

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EXAMINER	
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ART UNIT	PAPER NUMBER
3628	

MAIL DATE	DELIVERY MODE
02/10/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/681,092	**Applicant(s)** SHIMIZU, HIROKAZU	
	Examiner AKIBA K. ROBINSON BOYCE	**Art Unit** 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 28 October 2008.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Due to communications filed 10/28/08, the following is a final office action. Claims 1-21 are pending in this application and have been examined on the merits. The previous rejection has been maintained, and claims 1-21 are still rejected as follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 3, 7, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hudler (US 3,780,310), and further in view of Yap (US 6,481,712).

As per claim 1, Hudler discloses:

a stamp side-detecting portion which determines on which face of each of postal items a stamp is affixed, (col. 2, lines 3-31, photoelectric sensor for detecting stamps, where stamp sides are shown to be parallel to the direction of travel, where the photoelectric sensor may comprise one or more photoelectric cells provided with an optical system comprising 2 cylindrical lenses having longitudinal axes at an angle of 90 degrees to each other since it is not predetermined the location in which the stamp is stuck on the envelope, in this case, the second sensor positioned at 90 degrees with respect to a first sensor suggests stamp detection on either side of the envelope since the first sensor is already positioned at an acute angle, and 90 degrees from the acute angle would be a position on the opposite side of the envelope);

a sorting portion which sorts the postal items based on information determined by said stamp side-detecting portion, (this feature is obvious with col. 1, lines 6-11, where it is shown that mail items are turned over so that stamp faces face the same direction since the machine performing this operation would not be able to determine which postal item needed turning over if these particular postal items were not identified separately from postal items that did not need turning over); and

a facing portion which aligns the postal items so that their stamp faces face the same direction, (col. 1, lines 6-11, shows it is common in Post Office routings to turn over mail items so that postage stamps are on the same side).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to sort postal items based on which face of each of postal items a stamp is affixed with the motivation of obtaining necessary information needed for preparing mail items to be faced in the same direction.

As per claims 2, 18-20 Hudler discloses:

a stamp side-detecting portion which determines on which face of each of postal items a stamp is affixed, (col. 2, lines 3-31, photoelectric sensor for detecting stamps, where stamp sides are shown to be parallel to the direction of travel, where the photoelectric sensor may comprise one or more photoelectric cells provided with an optical system comprising 2 cylindrical lenses having longitudinal axes at an angle of 90 degrees to each other since it is not predetermined the location in which the stamp is stuck on the envelope, in this case, the second sensor positioned at 90 degrees with respect to a first sensor suggests stamp detection on either side of the envelope since the first sensor is already positioned at an acute angle, and 90 degrees from the acute angle would be a position on the opposite side of the envelope, and In addition, col 5, lines 3-22 shows that the photoelectric sensor is also rotatable about its optical axis. It is apparent in FIG. 6 that the illuminating device L can be rotated through about 30.degree. opposite to the direction of travel);

a sorting portion which sorts the postal items based on information determined by said stamp side-detecting portion, (this feature is obvious with col. 1, lines 6-11, where it is shown that mail items are turned over so that stamp faces face the same direction since the machine performing this operation would not be able to determine which postal item needed turning over if these particular postal items were not identified separately from postal items that did not need turning over); and

a facing portion which aligns the postal items so that their stamp faces face the same direction, (col. 1, lines 6-11, shows it is common in Post Office routings to turn over mail items so that postage stamps are on the same side).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to sort postal items based on which face of each of postal items a stamp is affixed with the motivation of obtaining necessary information needed for preparing mail items to be faced in the same direction.

Hudler fails to specifically disclose the following, however does disclose facing as disclosed above with respect to claims 1 and 2.

However, Yap discloses:

wherein said facing portion has multiple rollers with different mounting angles varying from tilted to erect, and a raising portion which raises the postal items sorted by said sorting portion so that the bearings of the postal items are changed from tilted to erect/Wherein said sorting portion has guide members for adjusting the ranges of the postal items when sorted/wherein said facing portion has a raising portion for raising the postal items sorted by said sorting portion so that the postal items are transported in an erect state/wherein said raising portion has multiple rollers with different mounting angles varying from tilted to erect, (col. 2, lines 28-32, shows transport includes driven roller and idler roller, w/col. 3, lines 25-44, shows mail pieces are turned to a vertical orientation for a vertical transport). Yap discloses this limitation in an analogous art for the purpose of showing that alignment can specifically be done at certain angles.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to sort based on the determination of which side of each of postal items a stamp is affixed with the motivation of sorting postal items by the analysis of stamp position.

As per claim 3, Hudler does not specifically disclose the following, however, does disclose a belt conveyor in col. 3, lines 9-12, and facing of mail items in col. 1, lines 6-11.

However Yap discloses:

a feeding portion which feeds the orientation-adjusted postal items to said stamp side-detecting portion, (col. 5, lines 63-65, feeder periphery of roller).

an orientation-adjusting portion which adjusts the orientation of the postal items so that the direction of their length coincides with the transport direction, (col. 3, lines 25-44, shows mail pieces are turned to a vertical orientation for a vertical transport). Yap discloses this limitation in an analogous art for the purpose of showing that the orientation of the mail should be in the same direction as it is being transported.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to adjust the orientation of the postal items so that the direction of their length coincides with the transport direction with the motivation of allowing postal items to actually fit properly on the transport.

As per claim 7, Hudler discloses:

a stamp position-detecting portion which detects the position of a stamp on each of the postal items aligned by said facing portion, (Col. 5, lines 42-46, positional orientation of the stamp determined through amplifier means together with sensor); and

canceling means which cancels the postal items based on information from said stamp position-detecting portion, (obvious with col. 6, lines 17-20, connecting only the amplifier channel that carries a useful output to the photoelectric sensing means since the amplifier means along with the sensor is used to detect the stamp position and if there is no useful output from the amplifier means, there will be no connection to the photoelectric sensing means, and therefore postal items can not be processed).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to cancel postal items based on information from the stamp position-detecting portion with the motivation of cancelling postal items based on output the is not useful for processing the postal items.

As per claim 17, Hudler does not specifically disclose the following, however does disclose facing in col. 1, lines 6-11, which obviously includes sorting as discussed above with respect to claim 1.

However Yap discloses:

> wherein said sorting portion has a paddle driven based on the information detected by said stamp side-detecting portion, (col. 3, line 65-col. 4, line 11, paddle). Yap discloses this limitation in an analogous art for the purpose of showing that a paddle is used for allowing the removal of a stack from a corresponding bin in a parcel sorting operation.

It would have been obvious to one of ordinary skill in the art to have paddle driven based on the information detected by said stamp side-detecting portion with the motivation of having conventional means on a sorter to physically sort postal items effectively by way of paddling the items into the correct pile.

As per claim 21, neither Hudler nor Yap specifically disclose wherein said rollers are made of an elastic material, but Hudler does disclose a belt conveyor in col. 3, lines 9-12.

However, official notice is taken that it is old and well known in the art for the rollers to be made of an elastic material. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for the rollers to be made of an elastic material with the motivation of making the rollers a material that would be able to effectively transport the postal items.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hudler (US 3,780,310), and further in view of Yap (US 6,481,712), as applied to claim1 above, and further in view of Yokoi, (US 2002/0046663 A1).

As per claim 8, neither Hudler, nor Yap disclose the following, however Hudler discloses ending postal processes as shown in

However, Yokoi discloses:

Wherein said canceling means seals a postmark on the stamps, ([0039], postmark). Yokoi discloses this limitation in an analogous art for the purpose of showing that postmarks are commonly used to identify the cancellation of a postage stamp.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to apply a postmark on the stamp to clearly identify that the stamp is no longer of use.

5. Claims 4-6, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hudler (US 3,780,310), and further in view of Yap (US 6,481,712), as applied to claim1 and further in view of Eckert, Jr. (US 3,038,607).

As per claims 4-6, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11.

However, Eckert, Jr. discloses:

a height-sizing portion which picks up postal items higher than a predetermined height so that the picked up postal items are fed to said stamp side-detecting portion/ further comprising a thickness-sizing portion which picks up postal items thicker than a predetermined thickness so that the picked up postal items are fed to said stamp side-detecting portion/a height-sizing portion which picks up postal items higher than a predetermined height while passing the other postal items equal to or lower than the predetermined height through under said height-sizing portion toward the downstream; and a thickness-sizing portion which picks up postal items thicker than a predetermined thickness from among the postal items passed through by said height-sizing portion, wherein the picked up postal items are fed to said stamp side-detecting portion, (Col. 1, line 70-Col. 2, line 3, shows that thickness is taken into consideration when feeding a postal item into stamp detector, in this case, height is inherent since both thickness and height are measurements of space, and in this case, the amount of space of a postal item is taken into consideration for feeding). Eckert, Jr. discloses these limitations in an analogous art for the purpose of showing that height and thickness are part of detecting a mail item.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use height and thickness for detecting postal items with the motivation of detecting postal items by a certain category.

As per claim 9, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11.

However, Eckert, Jr. discloses:

a branching unit which divides the transport destination into a branch for canceled postal items and a branch for uncanceled postal items, (Col. 1, lines 13-20). Eckert, Jr. discloses this limitation in an analogous art for the purpose of showing that cancelled and uncanceled postal items such as letters are separated.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to divide the transport destination into a branch for canceled postal items and a branch for uncanceled postal items with the motivation of separating postal items according to canceled status.

As per claim 10, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11.

However, Eckert, Jr. discloses:

a stacking unit which stacks the canceled postal items, (Col. 1, lines 42-48, stacking mechanism). Eckert, Jr. discloses this limitation in an analogous art for the purpose of showing means that would support a stack of letters, and place cancelled letters in stacks.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a stacking unit for stacking the canceled postal items with the motivation of stacking postal items according to canceled status.

As per claims 11/12, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11.

However, Eckert, Jr. discloses:

dividing the destination of the postal items into branches according to the stamp positions based on information from said stamp position-detecting portion/means for dividing the destination of the postal items into two branches, one for postal items with the canceled stamps in the front end and the other for postal items with the canceled stamps in the rear end, based on information from said stamp position-detecting portion., (col. 1, lines 49-59, groups of letters from first stacks are passed on for further handling). Eckert, Jr. discloses this limitation in an analogous art for the purpose of showing that postal items are sent to different destinations depending on the stack they are in.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to divide the destination of the postal items into branches according to the stamp positions based on information from said stamp position-detecting portion with the motivation of sending postal items to a destination based on whether or not it is cancelled.

As per claim 13, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11.

However, Eckert, Jr. discloses:

a first stacking unit which stacks the postal items with the canceled stamps in the front end; and a second stacking unit which stacks the postal items with the canceled stamps in the rear end, (Col. 1, lines 42-48, shows two different stacks). Eckert, Jr. discloses this limitation in an analogous art for the purpose of showing that cancelled stamps and no cancelled stamps go in two different stacks.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a first stacking unit and a second stacking with the motivation of separately stacking postal items according to canceled status.

As per claims 14, 15, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11.

However, Eckert, Jr. discloses:

a culling unit where a worker(s) culls the postal items picked up by said height-sizing portion and feeds the culled postal items to said feeding portion/an automated feeding unit which automatically feeds the postal items culled beforehand to the stamp side-detecting portion, (col. 1, line 60-Col. 2, line 3, where height is shows that thickness is taken into consideration when feeding a postal item into stamp detector, in this case, height is inherent since both thickness and height are measurements of space, and in this case, the amount of space of a postal item is taken into consideration for feeding).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a culling unit in conjunction with an automated feeding unit with the motivation of allowing a postal item to be fed based on size.

As per claim 16, neither Hudler nor Yap disclose the following, but Hudler does disclose facing of mail items in col. 1, lines 6-11 and a belt conveyor in col. 3, lines 9-12.

However, Eckert, Jr. discloses:

Wherein said orientation-adjusting portion comprises rollers and belts to change the bearings of the postal items from a tilted state to an erect state, (Fig. 1). Eckert, Jr.

discloses this limitation in an analogous art for the purpose of showing that rollers and belts are common means for feeding postal items.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use rollers and belts to change the bearings of the postal items from a tilted state to an erect state with the motivation of showing that rollers and belts aid in transporting postal items in different states.

Response to Arguments

6. Applicant's arguments filed 10/28/08 have been fully considered but they are not persuasive.

As per claim 1, applicant argues that the combination of Hudler and Yap does not disclose or suggest at least a stamp side-detecting portion which determines on which face of each of postal items a stamp is affixed. Specifically, applicant argues that Hudler does not contemplate use for determining the presence of a stamp on the face of the postal item, except in a limited predetermined area, and thus is unsuitable for determining on which face of each of postal items a stamp is affixed. However, as discussed above in the rejection, col. 2, lines 3-31 of Hudler shows a photoelectric sensor for detecting stamps, where stamp sides are shown to be parallel to the direction of travel. Since the photoelectric sensor may comprise one or more photoelectric cells provided with an optical system comprising 2 cylindrical lenses having longitudinal axes at an angle of 90 degrees to each other since it is not predetermined the location in which the stamp is stuck on the envelope, the second sensor positioned at 90 degrees with respect to a first sensor suggests stamp detection on either side of the envelope since the first sensor is already positioned at an acute angle, and 90 degrees from the acute angle would be a position on the opposite side of the envelope. In addition, col 5, lines 3-22 shows that the photoelectric sensor is also rotatable about its optical axis. It is apparent in FIG. 6 that the illuminating device L can be rotated through about 30.degree. opposite to the direction of travel.

As per claim 2, this claim is still rejected to reasons similar to those of claim 1.

Claims 3, 7 and 17-21 are still rejected at least by virtue of their dependence from claim 1.

Claims 4-6 and 9-16 are still rejected at least by virtue of their dependence from claim 1.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 571-272-6734. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the •Patent Application Information Retrieval (PAIR) system, Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

A. R. B.
February 10, 2009

/Akiba K Robinson-Boyce/

Primary Examiner, Art Unit 3628